lem can be maintained constant. Thus, in the write mode, the gain change-over signal applied from the signal processing circuit 9 is turned into its high level to turn off the analog switch AS, and the gain Gw is decreased to $Gw = 1 + (R_2(R_3+R_4))$.

FIG. 5 shows the practical structure of the amplifiers 20 and 21. Referring to FIG. 5, the outputs of the amplifiers 18 and 19 are applied to the amplifiers 20 and 21 respectively, and a timing pulse generating circuit 24 shown in FIG. 1 applies an extracting pulse signal to the amplifiers 20 and 21 to extract the writing pulse parts contained in the outputs of the amplifiers 18 and 19. Extraction of the writing pulse parts will be described with reference to FIG. 3 again. FIG. 3(e) shows the waveform of the extracting pulse signal applied from the timing pulse generating circuit 24. It will be seen in FIG. 3(e) that the pulse width of each extracting pulse is such that the pulse width of ach writing pulse is suitably extended taking into account the frequency characteristic of the TR detection system. Referring to FIG. 5 again, the extracting pulse is applied to an open-collector output TTL gate TG (for example, that sold under the trade name of SN7406) in each of the amplifiers 20 and 21, and, when the writing pulse is present, the input of the TTL gate TG is rendered null to ground the connection point between resistors R_5 and R_6 so as to extract the corresponding writing pulse part. As a result, the track offset ΔTR is eliminated as shown in FIG. 3(f), and the stability of the TR servo system in the write mode can be greatly improved. Since, in this case, the quantity of reflected light is lowered by a proportion corresponding to the duty factor of the extracting pulse, the gain Gw of the amplifiers 18 and 19 in the write mode must be selected while taking the above fact into account. In FIG. 5, the TTL gate is used to extract the writing pulse parts. However, it is apparent that the effect is equivalent to that described above even when a sample/hold circuit including means such as an analog switch is used to hold the TR detection signal for a period of time corresponding to the pulse width of the writing pulse parts by application of the extracting pulse signal.

It will be understood from the foregoing description of the present invention that, in the write mode, writing pulse parts are extracted from the TR detection system for a period of time corresponding to the writing pulse width, so that the tracking servo performance can be greatly improved.

We claim:

1. An optical recording and reproducing apparatus comprising:

light illuminating means for illuminating a light spot toward a recording medium;

a detection system detecting light reflected from said recording medium to derive an electrical signal from said reflected light;

an information processing circuit modulating the intensity of said light spot according to writing pulses to record information on said recording medium and using said electrical signal to reproduce information from said recording medium; and

a tracking servo circuit carrying out a tracking servo operation on the basis of said electrical signal, said tracking servo circuit including an extracting circuit for extracting time-wise portions of said electrical signal, and means for applying extracting pulses having a pulse width ~~at least equal to~~ greater than the writing pulse width to said extracting circuit so

that time-wise portions of said electrical signal corresponding to the writing pulses during recording of information are not utilized for the tracking servo operation when the extracting pulses are present.

2. An optical recording and reproducing apparatus according to claim 1, wherein the pulse width of said extracting pulses applied to said extracting circuit is determined while taking into account the frequency characteristics of a tracking servo signal of said tracking servo circuit.

3. An optical recording and reproducing apparatus according to claim 1, wherein said tracking servo circuit includes a gain change-over circuit for changing over the gain of said tracking servo circuit depending on whether information is to be recorded or reproduced.

4. An optical recording and reproducing apparatus according to claim 1, wherein the means for applying extracting pulses applies the extracting pulses to the extracting circuit at a timing corresponding to a timing of the writing pulses, the tracking servo circuit including a tracking servo loop with a variable gain.

5. An optical disk apparatus comprising:

a light source;

an optical system guiding light emitted from said light source toward a recording medium on a disk plate;

an information detection circuit separating light reflected from said recording medium on said disk plate from said optical system and photoelectrically converting said reflected light into an electrical signal;

an information processing circuit recording and reproducing information on and from said recording medium on said disk plate; and

means connected to said information detection circuit for applying extracting pulses having a pulse width ~~at least equal to~~ greater than that of writing pulses for recording of information to said information detection circuit so that time-wise portions of said electrical signal corresponding to the writing pulses during recording of information are not utilized for a tracking servo operation of a tracking servo circuit when the extracting pulses are present.

6. An optical disk apparatus according to claim 5, wherein the pulse width of said extracting pulses applied to said information detection circuit is determined while taking into account the frequency characteristics of a tracking servo signal of said tracking servo circuit.

7. An optical disk apparatus according to claim 5, wherein the means for applying extracting pulses applies the extracting pulses to said information detection circuit at a timing corresponding to a timing of the writing pulses, the tracking servo circuit including a tracking servo loop with a variable gain.

8. A method of optical recording and reproduction including the steps of directing a light -spot toward a recording medium, modulating the intensity of said light spot according to writing pulses to record information on said recording medium, and detecting light reflected from said recording medium to reproduce information from said recording medium, said method comprising the step of carrying out a tracking servo operation on the basis of an electrical signal detected from said reflected light and including applying extracting pulses having a pulse width ~~at least equal to~~ greater than that of said writing pulses so that time-wise portions of said electrical signal corresponding to the writing pulses

during recording of information are not utilized for the tracking servo operation when the extracting pulses are present.

9. A method of optical recording and reproduction according to claim 8, wherein the pulse width of said extracting pulses is determined while taking into account the frequency characteristics of a tracking servo signal of said tracking servo operation.

10. A method of optical recording and reproduction according to claim 8, wherein the gain of a circuit carrying out said tracking servo operation is changed over depending on whether information is to be recorded or reproduced.

11. A method of optical recording and reproduction according to claim 8, wherein the applying of extracting pulses includes applying the extracting pulses at a timing corresponding to a timing of the writing pulses, the tracking servo operation providing a tracking servo loop with a variable gain.